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May 21, 2005

Mr. Mark Friedrichs
PI-40
Office of Policy and International Affairs
U.S. Department of Energy
Room 1E190
1000 Independence Ave., S.W.
Washington DC 20585

RE: Comments. Proposed General and Technical Guidelines. 1605(b) Reporting
RIN Number 1901-AB11

C A P S U L E

Our thanks. We appreciate the efforts made by the developers of the general guidelines to reflect many comments in prior submissions that have improved on the original general guidelines. We appreciate the consideration to include the concept of product carbon sequestration as a valid reduction even if the guidelines have created a serious problem of equity and fairness for the manufacturing sector of the forest products industry, which we consider must be corrected as we are recommending. Likewise, the documents make clear the CO_2–zero or neutral character of the emissions from oxidation of biomass. It is important to make that distinction regardless it is already universally accepted. The inclusion of indirect emissions and their separate reporting is also appreciated as a needed item in the reporting and registration of reductions. We also welcome the statement on principles to be observed by the guidelines specifically the extra dimension clarified in the principle of accuracy regarding cost benefit. Principles are important and the guidelines should apply them consistently throughout.

We recommended the request for wide-entity emission reporting for any reduction registration and we see it included although some specific sections weaken this important credibility element. Nonetheless, for the specific forestry sector, if the entity is not claiming reductions in the forest carbon pool it should be given the option not to report wide-entity because of the substantial costs involved in annual assessments. Removing the requirement of having the CEO signing a certification is welcomed as practical. Still, there is need to complete this pragmatic step by allowing the entity to

designate whoever it considers proper without the guidelines designating a given job description as it does now.

These are the most important of modifications made as a result of the comments submitted by GP and reflected in the new proposals. We are grateful of these decisions by the developers of the general guidelines and encourage them to maintain and improve on them in the final document. These modifications also encourage us to keep suggesting others we think needed for the improving and fairness of the registry.

Timetable and Focus on Most Important issues. The technical guidelines are out for comment for the first time and it is our opinion that it would require more than this round of comments to put them in operational conditions. These guidelines are almost 400+ pages of material including the Appendices, which perhaps is an indication of the difficulties it creates for both reporters and registrants. The technical guidelines influence the general guidelines and as shown in the workshops, and by these comments, there are great concerns in practically all the business sectors about elements of the general and technical guidelines that need resolution.

All these issues mean that the six months period given for final FR publication will not be sufficient enough unless proper attention and care to this round of comments are provided as they should be. We are not aware yet of the "forms" to be used and this is again another element that will generate comments and revisions.

We consider that a few issues will decide the "pass or fail" character of this registry regardless if the envisioned schedule for its implementation is or not maintained as planned. We thus want to focus on these major issues the resolution of which are accompanied by proposed solutions. In the rest of the document, these main issues and others are commented providing solutions as appropriate.

Focusing on Priorities.

1-) The Responsibility for Reporting on Sequestration. A troublesome aspect of the guidelines; general and technical, is the unintended but nevertheless real neglect of the manufacturing sector in allocating responsibility for reporting either carbon reductions or avoided emissions derived from the manufacturing of its products and related actions. Basically, for the biogenic products manufacturing sector it is how the erroneous interpretation of 300.8(k) of the responsibility to report reductions by sequestratio**n** deprives the forest or agricultural product manufacturer of the right to report reductions. Other sections in the guidelines like TG 2.4.4.2 also reflect this erroneous approach. Regardless if unintended, this erroneous interpretation then sets a precedent of de facto discrimination against the manufacturing sectors not only about carbon sink reduction issues but also about other representations of reductions such as avoided emissions.

We witnessed, at the workshop, the concerns of other product manufacturers and waste managers about the arbitrary manner the rights to register have been granted to the timber owner depriving the manufacturers of the products of such opportunity. For many of them, it is not the concession of these reductions to the timber owner what triggers their concern but rather the disregard for the manufacturer sector efforts and interests and the conceptual preference for the owner of the source of raw material or waste. It means for us that the owners of the primary source of raw materials either timber or fly

ash or agricultural bio-based products, etc. are given the fruits of the efforts, innovation and economic risks of the manufacturing or services sectors that make possible the increase in the carbon pool or the avoided emissions themselves. We must remember that these sectors still are responsible for the GHG emissions in their operations.

One of the concerns of course is the anti-competitive trade issue since those manufacturing entities that also own timberland will obtain a preferential treatment against their competitors without timber and that depend on their supplies.

There are other issues of logistics and equity justifying the manufacturer's right to register. If carried farther into the product chain, the logistics and costs of monitoring and recording would exceed any economic benefit that may be involved in the registration of reductions. Further, the manufacturer of these products will have to report and register the GHG emissions associated during the manufacturing of these products. Neither the home owner, or the builder or the forest products distributors is subject to that obligation. They do not pick up the tab for these manufacturing and distribution emissions.

We consider that technical expediency and resistance to new models have obscured the comprehensive overview of the many factors involved. This disregard of the manufacturing sectors and their important role in reversing the existing cultural and technological trends affecting climate change is troublesome and contrary to well established policies and strategies of this Administration. For example, the approach goes contrary to the promotion of more use of bio-based products as one of the objectives of the Farm Security and Rural Investment Act of 2002 reflected specifically on provisions for biomass products designation and certification (FR, Vol. 70, 01.11.05 p 1808).

Reductions of GHG in carbon pools have to do with the increase in the carbon stock in that pool and not where the natural process of sequestration first occurred. It is the decision of the entity to increase the pool what makes the reduction. A harvested tree is indeed an example of a decision by the timber owner to reduce, not to increase, the carbon pool at the forest site. This erroneous and confusing concept and approach, expressed in 308 (k) and elsewhere such as TG 2.4.4.2, creates an inequity to the forest products manufacturing sector which extends to other sectors as shown at the second day of the workshops.

As an example of past recognition of the errors of this approach we would like to mention the California Climate Action Registry (CaReg) experience. The CaReg originally proposed, in addition to their existing emission registry, the registration of reductions from forest and product carbon sequestration pools. The initial proposal, similarly as the DOE/USDA technical guidelines, granted the right to register both forest and product carbon pool reductions to the landowner above certain established acreage. Georgia-Pacific and other forest product manufacturers associations objected to such approach on grounds that,

a) it ignores and does harm to the creators of the pool under consideration- carbon in products, namely the manufacturers of forest products. It deprives them the right to register their reductions.
b) the calculation methods for the product carbon pool are pale in accuracy and simplicity when compared with the newer, already peer-reviewed 100-yr method more

recently adopted by the industry and based on manufacturing facility production records of these products,
c) it created a conflict of interest which would lead to a “loop hole” allowing additional harvesting due to the product pool increases to unbalance the traditional growth – harvest relationship when referring to volumetric forest sustainability.
d) the unfairness extends to the landfill owners which maintain the other recognized carbon pool from products with a potential for registration.

CaReg re-proposed the original protocol and concluded to move forward with the forest carbon pool increases registration only. The registry “supports the idea of developing a protocol for the wood products manufacturing sector and “will inform interested stakeholders when it decides to develop a reporting protocol for wood product entities.” We will continue exchanging information with CaReg in an attempt to conclude on the registration for the manufacturing sector. This experience with CaReg exemplifies the realization that giving the timber owner the rights of registration for both reductions in different carbon pools is unfair and constitutes a damaging inequity to the manufacturer.

The association in the forest industry that represents both forestry and manufacturing entities, and those integrated at both ends, have been discussing this situation very carefully and recently the enabling committees decided on recommending the decoupling or “debundling” of the responsibility to report and register. Meaning, the recognition that the product carbon pool will be reported by the manufacturing sector alone. This is perfectly logical and practical since the same association has endorsed the GPCARB or 100-yr model which also has been presented to the rest of the International Council of Forest and Paper Associations, ICFPA. This position will be hopefully reflected in the association comments to the register now that there is an extension in the commenting period.

Further, the provisions **of I.E. 3.5** regarding sustainability and assumption of a carbon stock neutrality, regardless its pragmaticism, create issues of conflict of interest for the entity using this approach and claiming reporting of the product carbon pool increase from its harvested trees. At least, if the reporter opts for the “safe harbor” of an assumed carbon stock neutrality because of certification, it should not be allowed to register the carbon product pool.

It is not only our company or the manufacturing forest product sector without timberlands that is potentially damaged. Conceptually, the arbitrary disregard of the manufacturer’s contributions creates a pervasive situation for other groups and about issues other than carbon pool alone. Reductions by avoided emissions and others are also affected by the ill-conceived approach of disregarding the manufacturing sector or the service sector involved. For example, those creating bio-fuels from a raw material or agricultural material, corn, are already concerned about credits or reduction going to the farmer who does not manufacture the biomass product. The USDA has identified 83 potential areas for designation of bio-based products with about 30 products per area. It is known that many of them could be proven to be susceptible of the similar decay curves used by the USDA and by the GPCARB© 100-yr method (the original one). The cement factory that incorporates fly-ash in its production of cement, is also questioning why any credit for reduction should be given to a boiler owner or the waste or raw material source who otherwise would have to face a bigger waste disposal problem with additional environmental impact and cost. In all these cases, the manufacturer’s action and

decision creates the reduction, not the primary or raw material or waste generator. This is our position, equally applicable to all these different examples.

Recommended Solution

Our recommendations for resolution of this important issue are based on certain market realities in addition to the technical and fairness arguments and the CaReg experience cited in the above.

- It is true that industry only owns about 14% of the forest land of the USA and it depends on small individual landowners for 60 or 70% of its supplies of wood fiber to their manufacturing operations

- It is true that the number of integrated forestry and forest product manufacturing entities has been reduced in the last decade or so by accelerated consolidation.

- It is true that the number of independent manufacturers of forest and agricultural products without timberland surpasses amply the number of those integrated entities.

- Product carbon sequestration is significant in quantity and easily and accurately quantified with the new developed, peer-reviewed, GP-CARB 100-yr method based on production data from the manufacturing sector.[1],[2],[3].

- It is true that for the forest products contributing to the carbon pool a significant content are from recycled materials or fiber albeit more in the paper than in the wood sector, but still present in both regardless. This fact further separates the forestry entity from the responsibility of registering the product pool reduction.

- It is true that sustainable managed forests are essentially carbon neutral. For the most part, the amounts sequestered are too small to justify the significant resources that would be required to quantify the sequestered carbon fluxes or changes in carbon stock. Sequestration in forests may be minimal, as the industry generally harvests what it grows. There may be exceptions under certain circumstances.

- It is true that afforestation projects are widely recognized as acceptable forms of offset projects (domestically or internationally conducted) and they should be allowed to be part of the registration, by any entity, as any other offset

[1] GP GHG Protocol edition 2004, www.gp.com/enviro/strategy/protocol.pdf , Appendix 1
[2] International Organization for Standardization, ISO 14047/TR, example #3, Geneva, 2003
[3] Varied correspondence in adopting 100-yr method by the International Council of Forest and Paper Associations (2004)

Thus the following recommendations, derived from the above facts and reasons, are applicable in a win-win situation, to large emitters requiring wide-entity reporting.

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The manufactured of the products involved in the calculation of reductions via carbon pools or avoided emissions should be allowed to report and register those reductions as well as avoided emissions. If the manufacturing entity also owns forest it will report product reductions independently and separately of the forest part of the entity.

The sequestration reductions for forest and products carbon pool reductions should be decoupled or debundled so that entities with timberlands can opt to register carbon sequestered in their timberland or use the safe harbor of neutrality per 1.I.3.5, and manufacturers can register, separately, carbon sequestered in the products according to established calculating methods.

Entities with forests, regardless of opting from any of the alternatives on the above, as well as any other entity, could register individual afforestation projects as offsets.

Use of the GPCARB or 100-yr method which reflects accepted decays equations used in the US GHG Inventory report to the UNFCCC and allows for recognition of archival life in use for paper products and packaging.

The latter position would benefit all segments of the forestry and manufacturing sectors of the industry and most of the entities in those sectors characterized as large emitters.

Georgia-Pacific is of the opinion that these recommendations, eminently implementable, are the core of the solution for the problems associated with the concentration of responsibility for reporting sequestration in the timber owner as well as other issues regarding manufacturing sector neglect that extends beyond the forest product manufacturing. It will send also a signal to other manufacturing sectors that the new approach equally applies to their circumstances as cited in the above or other similar cases.

We urge the developers of the guidelines to seriously consider these specific recommendations. Georgia Pacific offers its considerable experience in entity GHG protocol and inventory and in the development of measurement methods for product carbon pool confident that it would be helpful to the developers in resolving this issue.

2-On the rating approach. This element of the technical guidelines is a very questionable artifact in the registry procedures. The entire approach failed to meet the two elemental standards in these classical activities, a) that there is indeed a quantifiable difference in accuracy among the four levels and b) that if such difference is established, the marginal cost in reaching the additional accuracy level is justifiable. These are undeniable requirements and lack of time now is not justification for disregard needed rectifications or deletion. Further, as we move out of the stationary sources where the rating system inadequacies is more egregious, we found that use of emissions defaults is then rated as high as “A” while for the stationary sources it was “D”. This system must

be rejected. It is clearly contrary to the principle of accuracy, and its extra dimension, set forth in the technical guidelines. We applaud the recognition made in the principle of accuracy to the extra dimension of cost-benefit. Unfortunately it has not been applied properly.

Recommended Solution. Recognizing the federal investment made in this proposal, a complete abolition of the rating system may not be advisable and we can accept that. But the new version of the guidelines must then recognize at the highest level, the use of peer reviewed emission default calculating tools. Most of the important energy intensive industrial sectors do have calculating tools peer-reviewed and available too at the WRI/WBCSD protocol website or at their own web sites. In Chapter 6 of the WRI/WBCSD's "The Greenhouse Protocol" there is a very good text about the credible and important role of activity data and calculating tools with default emissions factors. The Protocol urged the use of these recognized tools easily available in the website and others in consideration. The "Calculating Tools" of the paper and wood products industry are now internationally recognized after peer review and we expect them to be posted soon in the website of the greenhouse protocol as they are now elsewhere in the NCASI web site. Table 3, page 44 of the referenced Greenhouse Protocol lists the so far available calculating tools. They should be added by reference and included as Level "A", calculating tools. Calculating tools that have not been peer reviewed could then be "C". A logical calculating tool rating, B or C would be the SEIT tool. We urge this sensible recommendation be incorporated exactly as proposed in the cited reference (WRI/WBCSD, revised edition, March 2004). We also urged that rating levels be reduced to three levels since it would be easier to justify intuitively their separation. No time now for more rigorous studies. Consequently the present "pass or fail" figure for registration should be eliminated. Expressions at the workshops clearly indicated a great number of industrial sectors will not be able to pass with this system. The same is true for the forest products sector.

3) EIA Certificate Needs More "Punch" for Some Intended Uses. Now that it is clear that early credits for registered reductions cannot be reserved, the hope is that the markets would accept the EIA certificate of registration of reduction and that it would have a value in the market for trading. If such hope would have a chance to be fulfilled, the registry needs to provide the EIA certificate with more "punch" since the certificates reflect registrations from a pool of different quality itself. Registrations for reductions from direct and indirect emissions and those from forest sequestration, etc. do have different level of assurance requirements if from large or small emitters, if from certified forests, etc. The financial community would not be able to discern which one of the EIA certificates presents a lesser risk. Just encouraging third-party verification will not do it.

Recommended Solution. There should be a difference in the text of the EIA certificate, which would permit the holder of the certificate, at his/her option, to maximize its value in the market place. The text of the certificate must state that when the registration was submitted it was accompanied by a third-party verifier documentation attesting for the lack of material misstatements in the registration documentation. The third-party verifier must be given freedom to verify in the manner that ISO and other international systems considered best practice and waived the rating system as a major element of disturbance. In case the reporter submitted no third-party statement at the time of the registration, the certificate will not make any reference to this event either way.

It is true that by doing so the certification without the third-party verification statement may be considered of a lesser value. If so, it is a result of a decision taken by the reporter based on its own expectations about its registration. What is important is to preserve the options of the serious registrant to maximize the value of his/her decision to register.

Georgia-Pacific Comments. (Complementing the CAPSULE above)

May 14, 2005

Dear Mr. Friedrichs:
PI-40
Office of Policy and International Affairs
U.S. Department of Energy
Room 1E190
1000 Independence Ave., S.W.
Washington DC 20585

RE: Comments. Proposed General and Technical Guidelines. 1605(b) Reporting RIN Number 1901-AB11

Georgia–Pacific Corporation (GP) is one of the leading companies in the forest products industry sector with domestic and international manufacturing and sales operations worldwide on a variety of forest products; paper, packaging, consumer products, solid wood and building products, as well as chemicals used in those products and others. Consequently, we are also large consumers and generators of energy with a vital interest on energy and greenhouse (GHG) emission amelioration issues. Rightly, our

forest products are components of one of the two major carbon sequestration pools; carbon in products.

The fact that our corporate sustainability programs include GHG control measures comprising GHG inventory baseline and subsequent GHG inventories, make us very interested in the development of the registry and its provisions. We have commented earlier in May 2002 to the Department on this matter. We also commented on February 2004 on the proposed general guidelines following our attending the workshops of January 12, 2004. We believe that our accumulated experience in real life performance of GHG inventories protocols and effective measurement and commissioning third- party validation and verification in this area would be of help to the Department and other developers of the new, improved 1605(b) registry.

Georgia-Pacific has a demonstrated interest on these matters not only participating in the rule making but also developing and conducting worldwide entity GHG inventories and specific calculating tools. We do want a national registry, credible and operational rather than an inefficient proliferation of state and private registries. There are certain priorities for correction we are advancing in these comments and in this CAPSULE above that would allow for an operationally acceptable registry and still leaving room for improvements in a near future. We believe many other companies are in the same position we are.

Our thanks. We appreciate the efforts made by the developers of the general guidelines to reflect many comments in prior submissions that have improved on the original general guidelines. We appreciate the consideration to include the concept of product carbon sequestration as a valid reduction even if the guidelines have created a serious problem of equity and fairness for the manufacturing sector of the forest products industry, which we consider must be corrected as we are recommending. Likewise, the documents it makes clear the CO_2–zero or neutral character of the emissions from oxidation of biomass. It is important to make that distinction regardless it is already universally accepted. The inclusion of indirect emissions and their separate reporting is also appreciated. We also welcome the statement on principles to be observed by the guidelines specifically the extra dimension clarified in the principle of accuracy regarding cost benefit. Principles are important and the guidelines should apply them consistently throughout.

We recommended the request for entity-wide emission reporting for any reduction registration and we see it included although some specific sections weaken this important credibility element. Nonetheless, for the specific forestry sector, if the entity is not claiming reductions in the forest carbon pool it should be given the option not to report wide-entity because of the substantial costs involved in annual assessments. Removing the requirement of having the CEO signing a certification is welcomed as practical. Still, there is need to complete this pragmatic step by allowing the entity to designate whoever it considers proper without the guidelines designating a given job description as it does now.

Most importantly, we also appreciate the opportunity requested and granted to comment again on the General Guidelines. This is very important since the technical guidelines have also shown their influence in the general guidelines.

These are the most important modifications made as a result of the comments submitted by GP and reflected in the new proposals. We are grateful of these decisions by the developers of the general guidelines and encourage them to maintain and improve on them in the final document.

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Organization of Comments-With those caveats we submit our present concerns as well as supporting comments with these proposals and our views for improvement. They are reflected in three (3) Parts; overarching comments, specific comments for the general Guidelines, and specific comments for the technical guidelines. Since the almost 400 pages of guidelines material and their complexity and conflicting content demand many pages of comments, we have provided in the above a brief **CAPSULE** to stress the overarching problems as we see them and the recommendations to resolve them.

Our comments, whenever possible, provide a text of what the suggested alternative would be in order to complement our suggestions and responses in a more clear way to the comment reviewer. In some of them, we need to expand according to the importance of the issue and the level of impact on trade, competitive and equity issues. The comments address issues so complex and in such a manner that specific detailed solutions are not possible. In those cases we identify the problem, its causes and suggest a solution in general terms.

In general, the enhancement to the registry would depend on the seriousness and commitment of the developers on the three major enhancement areas. If it is allowed to try to become “popular” weakening the requirements to favor purported increases in number of participants, the registry will fail in its enhancement objectives. If it becomes an academic document without well-assessed cost benefits in its requirements for accuracy and in the credibility of its procedures, the market place will reject it as an ineffective instrument. Likewise, if the guidelines arbitrarily try to use terms, definitions and procedures contrary or alien to terminology amply used and tested, simply to depart from language that may be associated with the Kyoto Protocol, the market will be troubled by these new terms.

PART 1- Overarching and Crosscutting Comments on the Proposal and the Process

1- Flexibility and Comprehensiveness in the Commenting Process- Ensuring Proper Matching of General and Technical Guidelines and Reporting Forms. Upfront, we wish to make the case for the need of more flexibility, cohesiveness and understanding in the part of the developers. This is so because the multiple agencies and departments appear to be handling different parts of the entire registry and the resolution of comments. There are proposed decisions that appear to be the result of expeditious technical approaches by one department or agency that may not be the expected conclusion from other agencies more involved with the responsibility of trade and keeping a fair playing level field in commerce. The lack of technical guidelines at the time of the last round of comments precluded many commenters then to make proper comments at the 2004 commenting on general guidelines. Developers must recognize that under those conditions many areas of the general guidelines did not receive then comments that are now possible.

2- The essence of the enhancement to the 1605(b) registry is based on voluntarism and the role of the market place in the assigning of any potential economic value to approved, registered reductions. The voluntary nature of the registry and the need for enhancements confirm the implied purpose of letting the markets assign any economic value to the registered reductions. This is much so when the new proposal completely clarifies that it is not the registry ability to bestow an economic value via binding credits to those reductions. In fact, the role of the Energy Information Agency (EIA) is limited to the extension of a certificate for approved registrations, which presumably will be the limited way to encourage the market to act on such certificate for financial transactions. Such certificate reflect a variety of registrations with different criteria

Regardless questions on the operational feasibility of such mechanism, it is a fact that the concept guiding the registry is to allow the market to set the value of the EIA certificate. It is then important that the developers of the guidelines and implementers of this approach recognize it is not a technical project alone but a more complex economic, commercial, financial and technical project. The expectations of the registrants are different and so the EIA certificate cannot be a "one-size-fits all".

3- Reducing ambiguity by adding new definitions. We are not only suggesting modifications to some of the definitions in 300.2 but also adding new ones. Different interpretations of terms will not help in the application of the guidelines neither in the verification and the DOE/EIA acceptance processes. Our purpose in our comments is to reduce ambiguity, not flexibility.

4- Both the general guidelines and the technical guidelines need to reflect the underlining approach of a market using the registry and setting the value for reductions. The registry's developers must realize that not all existing and emerging programs on trading possess the gradation in risk-taking (depending on accuracy, reliability, validation, etc.) that has been built into the registry proposal. ISO 14064.3 recognizes different levels of assurance, which implied different levels of risk. Transferability and true value of registered reductions could be enhanced by such gradation and the lack of decision on the imperative of certification or validation to complement the EIA certificate. A certificate of registration of reductions must be accompanied, voluntarily, with third-party certification from accredited verifiers. Such added but yet voluntary provision will justify providing additional flexibility in the use of the registration and the value of the EIA certification..

5- Incompleteness in the treatment of "avoided emissions". The concept of "avoided emissions" is an important component of the efforts in stabilizing the impact of GHG. Sometimes its role in its efforts is misunderstood and there are complex issues in integrating them into a registry of discrete projects. Besides the narrowness in the definition of "avoided emissions", which appears limited to electricity generators and marketers, there are text and lack of thereof, in the quantification section of the proposal, section 300.8, that would render useless the implementation of this important concept.

We are concerned with the use of terms such as "real reductions" in isolation (without clarification) because it could bring the connotation that there are others that are unreal. The discussion about avoided emissions reductions is not limited to international circles but also domestically and in our opinion it is plagued with misinformation and improper terminology. We prefer to consider reductions as actual and virtual (existing in effect but not in actual form). In the same manner that cosmological physics recognizes the

existence of virtual positrons from the Sun holding the Earth in orbit and their effects can be measured but not observed as independent particles, avoided emission reductions can be estimated and their effects measured by the reduction of emissions intensity overtime. Avoided emission reductions, when properly assessed, are the long-term component to guarantee a consistent trend of improvement in GHG intensity ratios.

Besides the need to expand the definition for all activities other than the power generation or electric utility sector, we are concerned on the manner the proposal attempts to treat avoided emissions reductions just as if they were carbon stock changes. We think the approach taken is erroneous and creates a conundrum in the application of avoided emissions reductions and would damage the entire positive value of this concept. Avoided emission reductions are reductions per se. They are not the reduction calculated by changes in direct or direct emissions with regard to a base year emission. A decrease in avoided emissions when compared to a base year does not make an avoided emission and emission!! In the remaining of our specific comments we would be addressing the envisioned corrections and additions that we think would expand and consolidate, in practical ways, the use and wider acceptance of this essential element of any GHG reduction strategy.

6- The treatment of indirect emissions and reductions in quantification and reporting.
We will separate this comment into emissions and reductions because each one implies substantially different concepts and quantification language.

A) We support the inclusion of indirect emissions in the quantification and reporting as the proposal so states. Nevertheless, to avoid the possibility of double counting and the proper allocation of responsibilities for their generation among actors, it is important that they are never added. Indirect emissions are not owned by the entity but by the generator of the emissions who will treat them as direct emissions in its reporting. This is also the prevalent approach in existing protocols[4]. This is very important and it is a crosscutting issue for correction in this proposal. There is a statement about total emissions in the guidelines that requires the addition of direct and indirect emissions. This should be deleted.
B) Indirect emissions reductions. While the indirect emissions are not to be aggregated, netted or totaled with direct emissions, as explained in A), reductions achieved by the entity on indirect emissions are justifiable to be reported as reductions, regardless if separately, and it is considered valid to total them with any other reduction of direct emissions. Why? Because the ownership of the reductions is strictly of the entity that accomplishes the reduction via projects, practices, activities involving the spending of economic, human and intellectual resources, as well as the risks associated. If as recommended in the following, proper rules of adjustments to the base year are adopted, no double counting would occur with the generating facility because for it, direct emissions will not be adjusted for a decrease in production (or sales) as the results of reduction by the users.

[4] In the President's directives of February 2002 there is a clear insistence for enhancements to take into account emerging and international approaches. The separation of direct and indirect emissions is stressed in most of them. For example, the Georgia-Pacific's GHG Inventory protocol (www.gp.com/enviro/strategy/protocol.pdf), the WRI/WBCSD's The Greenhouse Gas Protocol, and others)

Even if the electricity generator has made investments to support the reduction at the consumer location, it does not change the above concept or basic rule. Simply, in those demonstrated cases, supplier and consumer would agree in the proper prices for those services.

7- A More "state-of-the-art" terminology.- There is need to keep improving in accepting terminology that is widely used in domestic and international methods for GHG inventory protocol. New terminology and definitions simply make it more difficult for the entire business community to accept and implement this registry. There is terminology widely accepted developed by the WRI/WBCSD for the GHG Protocol that most used and has been the basis for other GHG protocols of companies and sectors (GP uses as much as possible such developed terminology in its GP GHG Protocol. ISO/DIS 14064 also follows it closely.) In that sense, we respectfully consider that in Part III of the General Guidelines, Regulatory Review and Procedural Requirements" there should be added a reference "L" about the "Technology Transfer Act" and their guidance regarding the utilization of international or equally reputable standards and by implication its terminology or parts of it.

PART 2-Specific Comments on the GENERAL GUIDELINES

300.1- General (b) We would like to insist that the only practical purpose of reporting entity GHG inventory and reductions is for serious registration of these reductions after proper fulfillment of the requirements for registration. Reporting for the sake of reporting, with different levels on comprehensiveness, accuracy and credibility, does nothing to meet the three major objectives of the enhancement effort. In fact, it is a waste or displacement of resources that should better be allocated in other areas of the registration such as making the EIA certification as wholesome as possible. We make this comment realizing that there political decisions that would disregard its wisdom.

f) The anticipation of possible changes in the guidelines as a result of future periodic review should not be mentioned in these guidelines that will be codified in 10 CFR Part 300. It sort of biases the periodic review process. If those mentioned possible changes are so evident and important this is the moment to make them.

Please clarify that an increase in absolute emissions in an entity inventory versus prior year or the base year emissions does not negate the validity of the reduction projects accomplished that year.

300.2- Definitions.

In general, we favor sufficient number of definitions to eliminate ambiguity and confusion. There are terms that do not require definition because their meaning is well known. The guidelines miss many needed definitions and that is one reason of ambiguity (different than flexibility). The difference in interpretations must be kept at a minimum and that is why more and better definitions are needed. We are recommending the addition of certain minimum number of definitions and the corrections to some of the proposed. We have been trying to convince the registry developers and editors that other prior Protocols of GHG inventory, widely used and recognized, have grappled with these issues and arrived to a consensus in these definitions. Departing for this "best

practice" on definitions is wasteful, confusing and detracts from the credibility of the guidelines. In separate mail we are providing files on the latest Draft International Standards (DIS) of ISO 14064 series.

Aggregator- This new definition is very timid and ambiguous by the expression "usually small emitters". The guidelines should be clear on the type of entities that the "aggregator" can represent. If for statutory requirements the guidelines must address (regardless how briefly) "household" candidates besides entities, the "aggregators" could be a legitimate tool to aggregate households data in a neighborhood, etc. This should be stated clearly in the text of the general guidelines.

There is nothing conceptually favoring the use of "aggregator" to report for large emitters in specific programs such as the VISION program, which addresses industry sectors or the Climate Leaders that address entities. These programs are already working and in their inception none or few of the requirements now developed in the enhanced registry were available. It would be an unnecessary trouble and disruption to try to impose the requirements of the guidelines to these programs. Further, as an entity with potential registration expectations, we would not participate in the registry if the "aggregator" would register our data and thus acquire all rights on it. The "aggregator" role should be limited to reporting. Any further will be the results of specific contractual terms between the entity and the aggregator.

Avoided emissions- Presently, it is arbitrarily restricted to electricity generation and sale. It must be expanded to include other operations. Delete and use instead, *Avoided emissions. GHG emission reductions calculated relative to what the emissions would have been in the absence of the specific activity or project of the entity (baseline or reference case)*

This is an important definition needed to rightly expand the applicability of this type of reduction. It is also important because many are confusing the treatment of avoided emissions with the treatment of changes in carbons stock for forest sequestration. While in the latter a negative change implies also a change in the nature of the quantity (from reduction to emission), in the former, a negative change does not change the nature of the quantity. A lesser quantity of avoided emission does not make it an emission! It remains an avoided emission which is indeed a reduction!

Base period and base value. These new definitions specifically the one about "base value" depart unnecessarily from accepted terms in other protocols. They could create confusion specially the term "base value" that brings expressions other than GHG. We recommend more acceptable definitions such as the one in the Draft International Standard (DIS) of ISO 14064.1

base year
historic period specified for the purpose of comparing GHG emissions or removals or other GHG-related information over time

NOTE – Base year emissions or removals may be quantified based on a specific period (eg, year) or averaged from several periods (eg, years).

Add the definition of base year emissions. "*Base year emissions. Emissions and removals (sequestration) for the base year*". (This definition avoids the complications implied in "base value"

Add the new definition of boundary. As indicated in this document, the lack of definitions is reason for too much ambiguity in the document. That is an erroneous form of flexibility and must be reduced significantly. We suggest,

> *Boundaries. The actual or virtual line that encompasses all the emission sources and sinks or pools to be included in a GHG entity inventory or specific project for quantification and reporting. Organizational boundaries can be subdivided into countries, business units, etc.*
>
> Sink. We recommend using a definition of sink similar to the one in the UNFCCC but more general and complete. *Sink. Any process, activity or mechanism, which removes, captures and collects a GHG*.(avoid the perception it is a storage term)
>
> The proposed definition in 300.2 is different in the sense it addresses the storing of GHG that have been sequestered or captured. The ISO definitions of GHG reservoirs appear more acceptable and uncomplicated when addressing "storing".

greenhouse gas reservoir
physical unit or component of the biosphere, geosphere or hydrosphere with the capability to store or accumulate a GHG removed from the atmosphere by a GHG sink or a GHG captured from a GHG source

NOTE 1 The total mass of carbon contained in a GHG reservoir at a specified point in time may be referred to as the carbon stock of the reservoir.

NOTE 2 A GHG reservoir can transfer GHGs to another GHG reservoir.

NOTE 3 The collection of a GHG from a GHG source before it enters the atmosphere and storage of the collected GHG in a GHG reservoir may be referred to as GHG capture and storage.

> Modified the definition of entity. We have seen that as recommended, a definition of entity has been added, and we appreciate it. Nevertheless, the use of reporting and "part of any business" confuses the most important point of demanding whole entity requirements when registering reductions. A solution is offered as follow.
>
> *Entity- Single installation, set of installations, or production processes, stationary or mobile, that can be defined within a single geographical or organizational boundary.*
>
> The submitter would include all or part of the facilities. That will be the entity. If later, it modifies the number of facilities then it must change the submission and the corresponding requirements accordingly.

The definition of carbon stocks needs improvement since it reflects biases from traditional terms. It is not only wood products but all products from harvested trees and agricultural crops. Correct as follows;

> " including :T(t)rees, *products of harvested trees, agricultural crops* and other etc."
>
> The product carbon pool is an important expansion of the forest carbon pool created by the transformation, by manufacturers, of the harvested trees and agricultural crops. This component and quantification have been recognized for many years in the annual US GHG Inventory report to the UNFCCC, and its

quantification for entities is also available[5]. The registry, in following quantification procedures used for national GHG inventories and based on traditional data management, "bundle" these two pools without recognizing the new characteristics that climate change policies and economic factors have introduced on the matter. It is necessary for accuracy, consistency in the definition of carbon pools and fairness in the allocation of potential credits or financial benefits, to "debundle" the forest carbon pool from the product in use carbon pool. Different economic entities are involved. This topic will be discussed further and recommendations will be made to resolve this issue.

In the commenting on the Technical Guidelines we are clarifying again in more detail that in calculating removals (or deductions due to sequestration) the changes of carbon stock from actual year to base year are not applicable to the product carbon pool calculated using the GPCARB© model also known as the 100-year method as also known. An unfavorable difference in the annual estimations of the product-in-use carbon pool from one year to another is not an emission. The quantities of annual production of a given product are being reduced by decay equations that predict how much of that initial amount would remain in use after 100 yrs. The method looks forward and discounts the estimated amounts retired and considered emitted not stored. This interpretation is consistent with the use of decay equations in the annual report of the EPA to the UNFCCC.

Sequestration- Reword the definition to provide the distinction made in the technical guidelines Part G on engineered sequestration. The entire document should be coordinated as much as possible.

Total emissions- we again insist in the error of adding direct and indirect emissions into a total. The definition contains the unacceptable guidance to add direct and indirect emissions and report on a total of all these . We recommend deletion of this definition. Only reductions of direct and indirect emissions could be totaled, once reported separately.

In addition, the language of this very important quantification and reporting definition is not clear in its reference to the use of the term "sequestration" as therein defined.

A) Further, it is not clear what it addresses. Entity-wide emissions is a term closer to "gross" emissions thus the use of "or" in the title confuses.
B) Finally, as noted above, there appears to exist a disconnect between the definition of net emissions or entity wide emissions and the definition of "reductions". Consequently, we proposed, as one solution, the following revised text.

A review of the Figure 1 depicting the framework for a GHG entity inventory would help in the following revisions of the definitions of emissions and reductions. Caution must be taken in recognizing that the Figure 1 addresses Gross and Net GHG Inventories, not emissions. But we submit that the pictorial helps in understanding the role of the elements of an inventory: emissions, reductions and removals (sequestration)

[5] GPCARB© model of Georgia-Pacific Corporation available free of charges to requesters to the this writer. It is also explained in detail in the GP Protocol available in the web site ww.gp.com

In the following, we will address each of these issues separately. We consider, frankly, that the proposal is not clear in the understanding of the different terms. Another, clearer way to illustrate these definitions and terms is by the use of Figure 1 in the following. It is our favorite approach and we urge DOE to consider it because it resolves many problems once understood and accepted.

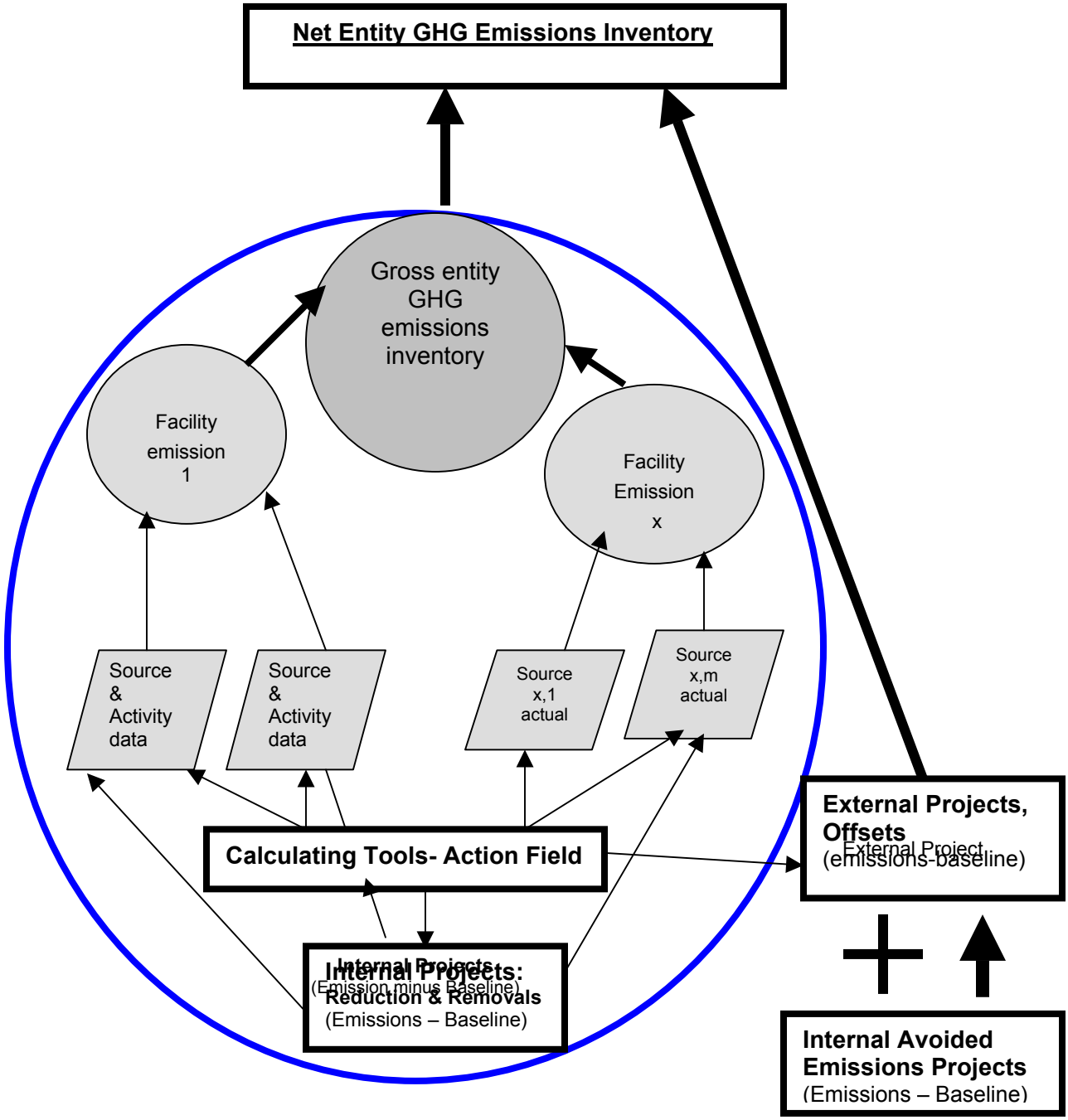

Figure 1- Schematic of the GHG Inventory Framework and Linkage with Project Reductions

Add the definition of *Gross entity-wide emissions. The annual direct emissions of the GHG as identified in section 300.6(d) inventoried according to section 300.6(b) and (c).* (Provide necessary modifications in those sections)

Net entity-wide emissions. The annual gross entity-wide direct emissions of the GHG identified in section 300.6(d) minus:

a) *changes relative to the base year of the forest carbon stock, inventoried according to section 300.6(b) and (c),*
b) *the entity's indirect emissions reductions relative to the base year inventoried according to section 300.6 (b) and (d),*
c) *offsets acquired by the entity outside its boundaries in the current year,*
d) *avoided emission reduction for the current year and*
e) *the contribution to the product-in-use carbon stock for the current year*

Net emission reduction or net entity-wide emission reductions. This definition can be improved to make it read more clear and accurate. In the way that it appears structured, there may not need to be labeled "net" but rather "total" because the definition itself implies a net. We suggest a definition that reads,

Sub-entity- We approve of this artifact that facilitates the expression of reductions and inventory results in absolute or intensity ratios as more feasible expressions for entity with a variety of products.

Total entity-wide emission reductions. The sum of the annual changes in direct and indirect emissions, and changes in forest carbon stocks, relative to the base year emissions, plus the avoided emissions determined for the year in question, plus the contribution to the product-in-use carbon stock for the year in question, plus any offset acquired in the year. All according with the provisions of 300.6.

It is clear that in the gross entity inventory, the results will reflect the emissions from all facilities rolled up (calculated by measurement or activity data) and including reduction from internal projects. The linkage of project reductions and the GHG inventory of the entity is our preferred approach that we have proposed and is reflected (as Draft International Standard, DIS) in the development of the ISO 14064 standard Part 1, entity inventory. This preferred approach would entail changes in these definitions but a visual like Figure 1, is clear indication of the need for substantial revisions in the definitions and text of 300.6.

Besides this overarching comment, we are making detailed comments in the existing text but the above is the best approach in our opinion and it has been tested in peer groups.

Regarding avoided emissions for the year in question. It is understood by many that change in avoided emissions from the reference year to prior or base year is a meaningless and incorrect estimation. What would be the treatment if the difference between and year and another produced a negative change? Would the result be not anymore an avoided emission? Would the avoided emission change be considered instead an emission (a penalty)? Our best way to explain it is by reminding the reader that we are talking about reductions and not emissions. A change or "delta" in emissions could be used to calculate a reduction or a further increase in emissions. But when talking about reductions, a

change or "delta" only provides a figure decoupled from emissions. Perhaps to indicate there was less avoided emission reduction but never consider the delta as more reduction (above what?) or an emission.

When we compare changes in carbon stock, a negative result means a change in the character of the quantity. It means that emissions from the reservoir exceeded the removals by the sink. Conversely, a change in avoided emissions reduction with a negative result simply means there were less avoided emissions but there has not been a change in the character. By definition of avoided emissions, they have never taken place regardless if in a smaller quantity.

Another reality that is introduced in these comments is the correct manner to quantify the contributions to the product-in-use carbon stock. Contrary to the change in carbon stock in the forest sink that could result in a removal or an added emissions, the methodology[6] in the product-in-use carbon stock that we are proposing, provides only number based on the annual production and not in changes. There is not the possibility of emissions by the model used since the resultant figure factors the discount of the original production at the end of the 100-yr period.

300.3- Guidance for defining the reporting entity. We respectfully suggest that if *"households, "* must stay their reporting be required through "aggregators" confined only to reporting.

The "encouragement" provided to entities in (b) for registering reductions at the maximum level of aggregation should be removed as an option. The language in this subsection is too vague to provide the needed seriousness when addressing registration.

300.4. Selecting operational boundaries for registering. Some needed corrections are suggested as follow:

The heading should be more explicit and expansive. It is not only for reporting but also for registration purposes. Insert *"reporting and* " in front of registering.

(b) (1) Financial control is acceptable basis for determining organizational boundaries. What is important is that once selected the approach is kept from then on forward.

300.5 Submission of an entity statement- There are several suggestions in this section. First we consider necessary,

a) to add a new type of entities, " *large emitters that intend to register emissions reductions with a third-party verification statement".* As indicated elsewhere in these comments, there are benefits in having a qualified third-party

[6] GPCARB© model, based on mathematical concept used in the US GHG inventory report for the United nations framework Convention on Climate Change. The "harvested wood in products pool" always yield removals regardless the fluctuation up and down) in contributions from year to year. Model available upon request to this submitter: sfgalean@gapac.com

verification a) for added credibility to the EIA certificate and b) to facilitate the acceptance of the certificate in certain financial and trading institutions already requiring a tho9rd-party verification.

b) also add " *large emitters that intend to report through an an association, etc. for specific programs such as VISION will do it outside the requirements of the 1605(b) guidelines.*

300.5 (b)- we understand the reasons to select 2002

300.5 (c). We have since inception trouble with the inclusion of small emitters in the entire process of registration. Firstly, the concessions on quality and accuracy of the data renders any certification from EIA questionable and tarnishing the one from large emitters. Secondly, the use of federal resources to be allocated for small emitters could exceed those from large emitters. Pareto's law applies in these cases. Small emitters should not participate as registers unless they abide by the same procedures for registration as large emitters registration.. Consequently, 305 (e) must be revised because it is not clear.

300(c) (2) . This subsection should made clear that the SEIT is intended for reporting by emitters of any size but not for registration purposes. Likewise, reference to ratings should e made according to comments in the above.

300.5 (g) and (h). In keeping with the original mandate that the enhanced new registry will reflect the latest international and best practices, this subsection should be modified and improved by the intent and text of existing protocols addressing the adjustment of the baseline or base year emissions as referred to. As an example, we offer the summary statement in the GP Protocol for GHG Inventories mentioned and referenced earlier. *For changes in ownership of facilities, processes or production levels affecting the boundaries of the initial base year or base year emissions the following general rule applies.*

- *If GHG emissions are created or eliminated, the base year emission is not changed.*
- *If GHG are transferred (ownership, management controlled, outsourcing, etc.) the base year emission is adjusted. In the Technical Guidelines more expanded information on these rules is provided.*
- *Changes in production, either increases or closing of facilities do not adjust the base year emissions. Likewise, the baseline for projects is not adjustable*

Very similar rules are reflected in the WRI/WBSD, the California registry, the ISO DIS 14064.1, etc. There must be certain minimal rules on this important aspect of the inventory for the purposes of achieving the proper accountability and transparency expected. Since the registry is allowing for inclusion of facilities outside domestic USA, this observation is very important.

300.6- Emission Inventories.

We suggest the text of the section be revised to reflect the essential in the graph submitted in page 9 of these comments. It is strongly suggested that the graph be included here. Other suggestions are as follows;

(a) General. We support the requirement that for registration, entity-wide inventories be a requisite. We are hard pressed to understand how otherwise, the registry could be used for purposes of trading, etc. In fact, to facilitate the financial value of the certificate from the EIA, we are recommending in the following and additional tier for registration so the EIA certificate distinguishes between a registration with a third-party recognized verification and a registration without it. There should not be conflict between entity inventory and project reduction registry since an increase in the annual inventory does not deny the validity of a compliant project reduction for that last year. We have also expressed our objections to small emitters registration and the relaxation of the requirements. This would lead to substantial differences in the credibility of EIA certificates.

There is need to better clarify the statement that an inventory should not include avoided emissions or offsets. In fact, any internal avoided emissions in the entity would be reflected in the results of the net GHG inventory. Both offsets and external avoided emissions should be included in the net emissions and reduction inventory. Perhaps it is a matter of semantics but it must be clarified. If offsets, which involved either specific projects or the purchasing of credit units, are not reflected some how in the Registry what is the value of discussing registration and the transferability of reductions? The market is artificially kept out of the registry in conflict with the overarching purpose in enhancing it.

The statement negating subsequent adjustments is unclear and perhaps even incorrect. First, we could assume that it refers to the base year emissions. If this is correct, a lack of adjustment provisions do disservice to the entity and introduces double counting or reporting when facilities are sold or bought. In the above of these comments we have provided simple adjustments rules and references to illustrate how it is done. Our own experience is that they work very well.

(b) Quality requirements, the rating system- We are opposed to this rating system that is biased in favor of facilities already obligated by regulations to use CEM systems. This element of the technical guidelines is a very questionable artifact in the registry procedures. The entire approach failed to meet the two elemental standards in these classical activities, a) that there is indeed a quantifiable difference in accuracy among the four levels and b) that if such difference is established, the marginal cost in reaching the additional accuracy level is justifiable. These are undeniable requirements and lack of time now is not justification for disregard needed rectifications or deletion. Further, as we move out of the stationary sources where the rating system inadequacies is more egregious, we found that use of emissions defaults is then rated as high as “A” while for the stationary sources it was “D”. This system must be rejected. It is clearly contrary to the principle of accuracy, and its extra dimension, set forth in

the technical guidelines. We applaud the recognition made in the principle of accuracy to the extra dimension of cost-benefit. Unfortunately it has not been applied properly.

Recommended Solution. Recognizing the federal investment made in this proposal, a complete abolition of the rating system may not be "political correct" and we can accept that. But the new version of the guidelines must then recognize at the highest level, the use of peer reviewed emission default calculating tools. Most of the important energy intensive industrial sectors do have calculating tools peer-reviewed and available too at the WRI/WBCSD protocol website or at their own web sites. In Chapter 6 of the WRI/WBCSD's "The Greenhouse Protocol" there is a very good text about the credible and important role of activity data and calculating tools with default emissions factors. The Protocol urged the use of these recognized tools easily available in the website and others in consideration. The "Calculating Tools" of the paper and wood products industry are now internationally recognized after peer review and we expect them to be posted soon in the website of the greenhouse protocol as they are now elsewhere in the NCASI web site. Table 3, page 44 of the referenced Greenhouse Protocol lists the so far available calculating tools. They should be added by reference and included as Level "A", calculating tools. Calculating tools that have not been peer reviewed could then be "C". A logical calculating tool rating, B or C would be the SEIT tool. We urge this sensible recommendation be incorporated exactly as proposed in the cited reference (WRI/WBCSD, revised edition, March 2004). We also urged that rating levels be reduced to three levels since it would be easier to justify intuitively their separation. No time now for more rigorous studies. Consequently the present "pass or fail" figure for registration should be eliminated. Expressions at the workshops clearly indicated a great number of industrial sectors will not be able to pass with this system. The same is true for the forest products sector. The rated system is artificial without any clear or otherwise evidence of a cost benefit analysis that justify its imposition. The assumption that it will improve accuracy is not demonstrated or even attempted to. We do not know of any Protocol for GHG inventories that establishes such system, domestically or internationally.

(d) Direct emission inventories. It is an imperative that emissions of CO_2 from biomass oxidation (not only combustion which is a form of oxidation) be reported separately as "carbon neutral" and never considered a « direct emissions ». Otherwise, confusion and errors would result.

> We propose as a solution to modify (d) to read, " *Entities combusting biomass fuels should include as direct emissions the methane and nitrous oxides GHG resulting from biomass combustion but not the CO2 emissions, which are recognized carbon neutral.*
> Add a new paragraph,
>
> *Carbon neutral biomass oxidation emissions. Carbon dioxide emissions from the oxidation of biomass fuel, products or discard forest products, etc. are considered carbon neutral. They should be reported separately from direct or indirect emissions and their quantity must not be included in combination with other any other categories, totaling or netting but for the purposes of informational reporting only.*

(f) There is need to add in the sub-clause about terrestrial carbon, the consideration of the product carbon pool. A sentence just before the last sentence in (f) would help prepare the more detail accounting approach in the Technical Guidelines. We suggest ….

"*Similar considerations must be extended to the calculations of that portion of the terrestrial carbon stock that constitutes the "product carbon pool". Methodology exists that calculates the apportioned quantity based on annual production of different categories of biomass products thus "debundling" the two carbon pools- forest and product. . Releases of CO2 from biomass products are, of course, discounted from the product in use pool but are neutral and not emissions per se*[7]*.*

Careful consideration must be given in the Technical Guidelines on the steps for calculating the "removals" from this sub-set or sub-pool of the harvested tree carbon of the forest sequestration pool. As done normally, harvested tree is considered an emission and discounted from the estimated growth in biomass. Consequently, if in a given year an entity product carbon estimation is lower than the prior or base year, there is not a reversal from removal to emission. It is just that the year in question contributed to the product in use pool in a lesser amount but it is still a removal not an emission reference. That difference is reflected in a similar increase in the rate of growth of C stock at the forest. At the time of commenting on the Technical Guidelines, we will provide such demonstration.

As indicated in the following of these comments , both in 308 (k) and in the technical guidelines, the manner in which responsibility for the reductions is stated regarding sequestration is erroneous and damaging to important sectors of the industry.

(g)Treatment of de minimis emissions. We consider that expressing de minimis as a percentage is an expediency that impacts on the accuracy of the results and reductions themselves. Unless so indicated, all registrants will deduct 3% from their totals in the inventory and reserve to do so for the base year emissions thus creating an artificial reduction. If the 3% is to remain for expediency, it must be applied to the base year emissions too Then developers of the registry must realize that this de minimis does not alleviate issues of uncertainty and errors as the text in the guidelines appear to insinuate. It is always a matter of wondering how the up to 3% will be established. There are not instructions to establish it. This approach, by itself, would create more uncertainty and inaccuracy to the purported benefits of the rating system.

[7] GPCARB© model of Georgia-Pacific Corporation is available free of charges to requesters to this writer. Basic information on the approach in Appendix 1- GP's Inventory of Greenhouse Gases- Protocol, www.gp.com/enviro/strategy/protocol.pdf

(i) Covered gases. Because not all of other recognized GHG do have internationally accepted GWP, we suggest they do not be included in the reporting information ands the registry address only the six recognized ones.

j) Units for reporting. This section should be expanded recognizing different "calculating tools" technical documents developed to reflect the specific characteristics or processes in different industry sector, i.e. API, NCASI, etc. The General Guidelines must indicate so and consideration be made in the text accordingly either in the general or technical guidelines.

300.7 Net emission reductions

For reasons indicated before and in the following we prefer the heading to address "total" rather than net for which a description of "total entity-wide" emission reduction.

(a) There is need to edit these sentences to properly and accurately reflect the concept and correction mentioned under 300.2 regarding the correct treatment of avoided emissions (not based on changes) and offsets in both inventory and for reduction purposes.

*Total entity-wide emission reductions. The sum of the annual changes in direct and indirect emissions, and changes in forest carbon stocks when compared to the prior year or the base year emissions**, plus** the avoided emissions determined for the year in question and the carbon in product in use plus offsets acquired in the current year. All according with the provisions of 300.6.*

In this paragraph it is the first time that offsets appear to be permitted for registration but it is not clear if part or not of the inventory. We have indicated already that for transparency and clarity, the offsets and the external avoided emissions should be part of the inventory report and registration, which ever the final format.

We do not consider (b) (2) should be part of this section. The language is vague and unclear and leaves it to the registrant the decision of what or not is practicable. If any exemption is made to the general requirement of the guidelines it should be clarified between the EIA and the registrant in the certification process.

(d) On the aggregator. Our position in earlier comments is that the "aggregator" participation only for reporting should not be limited to small emitters but all types of emitters. Conversely, the "aggregator" must only report and not register large emitters. Registration by of large emitters by "aggregators" would confuse and make the process very difficult. We can see situation in which an "aggregator" of small emitters, a cooperative, could benefit the membership if allowed to report. Using the "aggregator" for purposes of reporting either under the VISION or the Climate Leaders programs is inappropriate because these programs were conceived before these guidelines and adjustment to the terms and requirements of these guidelines would be quite disruptive.

(e) Adjusting for year-to-year increases in net emissions. We believe this paragraph is confusing and certainly not clear. It mixes inventory with reductions in a manner that is not practical and efficient.

The overall reduction (or increases) in a wide entity emission inventory for a given year with respect to the base year emissions is the difference between the inventoried net emissions in that given year and the inventoried, adjusted, net emissions in the base year. That is the practical and efficient way to obtain the net increase or decrease.

Attempting to calculate total (net was commented above as improper) reductions as it appears in (b) is very confusing and probably inaccurate.

The guidelines provide an example of treating consecutive reductions and increases from the inventory. This may appear acceptable but it is different to the better, recognized adjustment to the base year, which are included and justify in the most recognized protocols and in the ISO/DIS 14064.1.

This entire section needs proper revision and adjustment to recognized domestic and international best practice. Only in 300.8 (e) (2) there is a casual reference to the need to revise or establish new base periods and base values. The guidelines must provide guidance in this important element of the inventory as we have suggested.

300.8 Calculating emission reductions.

300.8 (a) establishing a base year emissions. We recommended already adding the definition of base year emissions as a way to avoid the ambiguity of the text without definition. Is a submitter reports as entity half of the operations or facilities that is the entity with the caveat that it will remain that way or resubmitted. There is no need to use the tem sub-entity. It brings unnecessary confusion.

300.8(b) Calculation- Preamble and (d). In both places we consider there is need to change the text to reflect the correction justified earlier in our comments about avoid emissions calculations and the definitions of avoided emissions.

300.8(b) (2). The prohibition to consider absolute reductions of direct and /or indirect emissions because of decrease in US output (?) is in error as we addressed this matter earlier in the overarching comments part of our comments. The general Guidelines must reflect the best practice in other protocols and be used for accounting purposes and not misguided rewarding or punishing instruments. This is very important and persistence of this contradictory approach would create great havoc in other systems or render the 1605(b) meaningless.

Other comments to sections 308 (c) to (g) are included in the commenting of the technical guidelines.

308 (h) (5) Action specific or project-based emission reduction .We favor the registration of internal actions or projects (within entity boundaries) in the registry. This is what the ISO/DIS 14064 refers as directed actions to avoid confusion with the external projects. We do not see any contradiction with the entity-wide inventory but a symbiotic process. Nevertheless, the guidelines must make clear, as indicated in the graph submitted earlier, that the gross emissions inventory reflects the accomplishments of these projects. Why do we want them register? For many reasons. One would be the desire to move them out of the registry for purposes of trading, transfers or crediting in ways that

may not be clear today. Another reason because the entity may want to refer to them in their annual reporting or in communications, etc. For example, Georgia-Pacific's GHG Protocol anticipates the linkage of projects with the inventory, which allows for the orderly and proper establishment of a registry of internal projects[8]. As 300.7 (3) anticipates, there may be a year when registration is about increases and not reductions for different reasons. A registry of reduction projects provides additional information on the positive accomplishments of the entity.

308 (k) Determining the entity responsible for emissions reductions. We need to take vigorous exception to the confusing and erroneous manner the responsibility for sequestration is allocated. The last portion of the presumptive statement of responsibility for sequestration is confusing and erroneous. It is in error because the responsibility must be allocated to the entity making possible the increase in carbon stocks for the pools in consideration. Simply, there is no other way around it. Such increase is what determines the reduction.

Ultimately, sequestration of atmospheric carbon dioxide, through biologic processes in the forest or agricultural crops, is a natural process in principle. The responsibility for emissions reductions via increase of carbons in the pool is not in the initial removal by a natural process but in the subsequent decisions and added value leading to the increase in carbon stock in the two conventional pools- forest and products-in-use. In fact, carbon in harvested tree reflects a responsibility for a decision that is not a reduction but an emission.

Having clarified this error, we must address the confusion created which is further compounded by the attempt to "bundle" the carbon in the forest pool and its transfer to the other pool- the product in use. There are reasons buttressed in tradition that make possible the understanding of the errors incurred. At the time the US GHG Inventory was initiated and even before, this was a traditional approach devised by the forest service (ignoring the agricultural crops). Nevertheless, such understanding, acceptable for national GHG inventory, is not reason to impede progress and to create harm in vital sectors in the supply chain. There is now a more reliable method to ascertain the product carbon pool increases based on the manufacturing plant production and which uses similar decays equations used in the national inventory. It is disingenuous to called this process 100-yr when the 100-yr feature is the results of Georgia-Pacific developments of a model for carbon sequestration. The industry and other wood and paper associations worldwide has recognized this approach which already has passed a rigorous peer review as example #3 in the ISO 14047 document on application of LCIA.

The new policies and financial markets created as a result of the climate change issue have modified the methodological approaches, enhancing them to the point it is now possible to calculate the product carbon pool in a more accurate and effective manner. Now it is possible to "debundle" the calculation of the two pools providing the responsibility for reporting or registering to the proper entities that add value to the two functions in question- the timber owner or agricultural farmer, and the manufacturer of the forest and agricultural products.

The registry appears to propose that regardless the manufacturing entity be the responsible to report and register its GHG emissions, direct and indirect, created during

[8] Section 4, page 15 on GP' Protocol, www.gp.com/enviro/strategy/protocol.pdf

the manufacturing of those forest products, it is then deprived of the right or responsibility to register the product carbon in the pool created by its added value to the harvested tree.

A harvested tree per se does not have any carbon pool value, just an economic value. It is the processing of the harvested tree into useable products that makes possible the transfer of the carbon removed from the forest into the product in use pool. Otherwise, the felled tree will release again the sequestered carbon back into the atmosphere.

As an example of past recognition of the errors of this approach we would like to mention the California Climate Action Registry (CaReg) experience. The CaReg originally proposed, in addition to their existing emission registry, the registration of reductions from forest and product carbon sequestration pools. The initial proposal, similarly as the DOE/USDA technical guidelines, granted the right to register both forest and product carbon pool reductions to the landowner above certain established acreage. Georgia-Pacific and other forest product manufacturers associations objected to such approach on grounds that,

a) it ignores and does harm to the creators of the pool under consideration- carbon in products, namely the manufacturers of forest products. It deprives them the right to register their reductions.
b) the calculation methods for the product carbon pool are pale in accuracy and simplicity when compared with the newer, already peer-reviewed 100-yr method more recently adopted by the industry and based on manufacturing facility production records of these products,
c) it creates a conflict of interest which would lead to a “loop hole” allowing additional harvesting due to the product pool increases to unbalance the traditional growth – harvest relationship when referring to volumetric forest sustainability.
d) the unfairness extends to the landfill owners which maintain the other recognized carbon pool from products

CaReg re-proposed the original protocol and concluded to move forward with the forest sequestration registration only. The registry “supports the idea of developing a protocol for the wood products manufacturing sector.” and “ will inform interested stakeholders when it decides to develop a reporting protocol for wood product entities.” We will continue exchanging information with CaReg in an attempt to conclude on the registration for the manufacturing sector. This experience with CaReg exemplifies the realization that giving the timber owner the rights of registration for both reductions in different carbon pools is unfair and constitutes a damaging inequity to the manufacturer.

Besides the conceptual argument advanced above that rejects and demolishes the erroneous argument of the proposal about the place where sequestration occurs, the additional provisions **in 1.I.3.5** about sustainable managed forest poses a serious issue of equity that must be factored in a final decision. The forest entity by obtaining a sustainable forestry certificate from different t programs, is allowed by the registry to also claim that the carbon stock changes are zero: no increases or decreases. This assumption, regardless its pragmatism, leads to other conflict of interest considerations when the same entity that opts to use this neutrality approach is allowed to claim the reduction in the product pool. Since none of these sustainability programs involved explicit calculations of the carbon stock to verify this assumption, the consequences of a

harvesting without linkage to the carbon stock changes is a matter of serious consideration.

We witnessed, at the workshop, the concerns of other product manufacturers and waste managers about the arbitrary manner the rights to register have been granted to the timber owner depriving the manufacturers of the products of such opportunity. For many of them, it is not the concession of these reductions to the timber owner what triggers their concern but rather the disregard for the manufacturer sector efforts and interests and the conceptual preference for the owner of the source of raw material or waste. It means for us that the owners of the primary source of raw materials either timber or fly ash or agricultural bio-based products, etc. are given the fruits of the efforts, innovation and economic risks of the manufacturing or services sectors that make possible the increase in the carbon pool or the avoided emissions themselves. We must remember that these sectors still are responsible for the GHG emissions in their operations.

We consider that technical expediency and resistance to new models have obscured the comprehensive overview of the many factors involved. This disregard of the manufacturing sectors and their important role in reversing the cultural and technological existing trends affecting climate change is troublesome and contrary to well established policies and strategies of this Administration promoting more use of bio-based products as one of the objectives of the Farm Security and Rural Investment Act of 2002 reflected specifically on provisions for biomass products designation and certification (FR, Vol. 70, 01.11.05 p 1808).

Reductions of GHG in carbon pools have to do with the increase in the carbon stock in that pool and not where the natural process of sequestration first occurred. It is the decision of the entity to increase the pool what makes the reduction. A harvested tree is indeed an example of a decision by the timber owner to reduce not to increase the carbon pool at the forest site. This erroneous and confusing concept and approach, expressed in 308 (k) and elsewhere, creates an inequity to the forest products manufacturing sector which extends to other sectors as shown at the second day of the workshops.

It is not only our company or the manufacturing forest product sector without timberlands that is potentially damaged. Conceptually, the arbitrary disregard of the manufacturer's contributions creates a pervasive situation for other groups and about issues other than carbon pool alone. Reductions by avoided emissions and others are also affected by the ill-conceived approach of disregarding the manufacturing sector or the service sector involved. For example, those creating bio-fuels from a raw material or agricultural material, corn, are already concerned about credits or reduction going to the farmer who does not manufacture the biomass product. The USDA has identified 83 potential areas for designation of bio-based products with about 30 products per area. It is known that many of them could be proven to be susceptible of the similar decay curves used by the USDA and by the GPCARB© 100-yr method (the original one). The cement factory that incorporates fly-ash in its production of cement, is also questioning why any credit for reduction should be given to a boiler owner or the waste or raw material source who otherwise would have to face a bigger waste disposal problem with additional environmental impact and cost. In all these cases, the manufacturer's action and decision creates the reduction, not the primary or raw material or waste generator. This is our position, equally applicable to all these different examples.

Recommended Solution

Our recommendations for resolution of this important issue are based on certain market realities in addition to the technical and fairness arguments and the CaReg experience cited in the above.

- It is true that industry only owns about 14% of the forest land of the USA and depends on small individual landowners for 60 or 70% of its supplies of wood fiber to their manufacturing operations

- It is true that the number of integrated forestry and forest product manufacturing entities has been reduced in the last decade or so by accelerated consolidation.

- It is true that the number of independent manufacturers of forest and agricultural products without timberland surpasses amply the number of those integrated entities.

- Product carbon sequestration is significant in quantity and easily and accurately quantified with the new developed, peer-reviewed, 100-yr method based on production data from the manufacturing sector.[9],[10],[11].

- It is true that for the forest products contributing to the carbon pool a significant content are from recycled materials or fiber albeit more in the paper than in the wood sector, but present regardless. This fact further separates the forestry entity from the responsibility of registering the product pool reduction.

- It is true that sustainable managed forests are essentially carbon neutral. For the most part, the amounts sequestered are too small to justify the significant resources that would be required to quantify the sequestered carbon fluxes or changes in carbon stock. Sequestration in forests may be minimal, as the industry generally harvests what it grows. There may be exceptions under certain circumstances.

- It is true that afforestation projects are widely recognized as acceptable forms of offset projects (domestically or internationally conducted) and they should be allowed to be part of the registration of any entity, as any other offset

- The individual landowner is hard pressed to afford the additional costs and justification of neutrality by certification or measurement in order to register. The logical requirement in the guidelines to show neutrality in order to claim product carbon reductions creates a conundrum for the individual landowner because any harvesting in small lots will show a deficit and no registration will be possible until it growths back to compensate the deficit.

[9] GP GHG Protocol edition 2004, www.gp.com/enviro/strategy/protocol.pdf , Appendix 1
[10] International Organization for Standardization, ISO 14047/TR, example #3, Geneva, 2003
[11] Varied correspondence in adopting 100-yr method by the International Council of Forest and Paper Associations (2004)

There are other issues of logistics and equity justifying the manufacturer's right to register. If carried farther into the product chain, the logistics and costs of monitoring and recording would exceed any economic benefit that may be involved in the registration of reductions. Further, the manufacturer of these products will have to report and register the GHG emissions associated during the manufacturing of these products. Neither the home owner, or the builder or the forest products distributors is subject to that obligation. They do not pick up the tab for these manufacturing and distribution emissions.

Thus the following recommendations, derived from the above facts and reasons, are applicable in a win-win situation, to large emitters requiring wide-entity reporting.

-The manufactured of the products involved in the calculation of reductions via carbon pools or avoided emissions should be allowed to report and register those reductions. If the manufacturing entity also owns forest it will report product reductions independently of the forest part of the entity

-The sequestration reductions for forest and products carbon pool reductions should be decoupled or debundled so that entities with timberlands can opt to register carbon sequestered in their timberland or use the safe harbor of neutrality per 1.I.3.5, and manufacturers can register carbon sequestered in the products according to established calculating methods.

-Entities with forests, regardless of opting from any of the alternatives on the above, as well as any other entity could register individual afforestation projects as offsets.

Use of the GPCARB or 100-yr method which reflects accepted decays equations used in the US GHG Inventory report to the UNFCCC and allows for recognition of archival life in use for paper products and packaging.

The latter position would benefit all segments of the forestry and manufacturing sectors of the industry and most of the entities in those sectors characterized as large emitters.

Georgia-Pacific is of the opinion that these recommendations, eminently implementable, are the core of the solution for the problems associated with the concentration of responsibility for reporting sequestration in the timber owner as well as other issues regarding manufacturing sector neglect that extends beyond the forest product manufacturing. It will send also a signal to other manufacturing sectors that the new approach equally applies to their circumstances as cited in the above or other cases similar cases.

We urge the developers of the guidelines to seriously consider these specific recommendations. Georgia Pacific offers its considerable experience in entity GHG protocol and inventory and in the development of measurement methods for product carbon pool that would be helpful to the developers in resolving this issue.

300.9- Reporting and record keeping requirements.

(a) This section should clarify the difference between reporting for registration and reporting since registration are for reductions achieved after 2002

(b) continuing to report. Besides the text in the proposal, there is need to address the reporting of adjustments to the base year emissions. We proposed as a solution to reword (b) (3) to read as follows,

(b)(3) entities reporting base year entity-wide emissions, will report on the adjustments to the base year inventory according to the adjustment rules of these general guidelines.

We agree that if a submitter fails to report three (3) consecutives years, its case will be closed.

300.10 Certification of reports

(a), second line---delete "or household head" for the reasons provided in the Overarching comments in the above.

(a) second and third lines. It is unnecessary that the guidelines assigned who in the organization must report about the GHG inventory. Suffice to say, *" or the designated person".* Although the revised general guidelines provides options for the person certifying the report still tries to impose specific titles such as " the person responsible for reporting the entity's compliance with environmental regulations". This is an unnecessary prescription on the entity's organization and must be removed. It is another example of "command-control" intervening in the entity's internal right to designate managers for specific functions.

300.11- Independent verification.

(b) (2) and (30, delete. They are unnecessary redundancies of the requirements in (1)(ii). We recommend to the developers of the registry to please consider ISO/DIS 14064.3 for guidance in this regard since the manner the registry section is worded it demands from the verifier tasks which are not presently common and which would discourage them to accept work in this area or the owner in requesting their services because of the substantial costs involved.

Frankly, the registry guidelines developers are not verifiers. ISO 4064.3 was developed by many international experts who are in fact doing the verification in transferable units subject to the risk acceptance of existing markets. They also have been reviewed and revised by experts representing the business and other sectors thus ensuring credibility and cost benefit requirements. A simple reference to the ISO/DIS 14063.3 would resolve many issues and disparity in types of certificates.

300.12- Acceptance of reports and registration of entity emission reductions.

DOE and EIA must realize that the requirement for annual reports require a proper response from EIA of the prior submitted report. There should be more assurance that in 6 months such response will be provided otherwise the reporting should be every other year after the first year or start year.

PART 3- Comments on DRAFT TECHNICAL GUIDELINES-

3A- Chapter 1- Emission Inventories

General comment- These guidelines should have followed best practices explained and contained in other domestic and international protocols rather than "reinvent" many terms and procedures. We respectfully consider there is need for a second round on these technical guidelines to make them really practical and in tune with the principles invoked, specifically accuracy. The inconsistency and arbitrariness in the rating system devised for the calculations is reason of concern. It is so bias in favor of existing procedures in certain regulated sectors that unnecessarily penalized all other sectors. A reminded to all is that CEM was an amply debated regulatory requirement in the bright years of "command- control". Imposing it now in this inventory does not make any sense when further no cost-benefit analysis or even evidence that is more accurate than other have been attempted

1.A.2- Purposes and Principles

Although we would have written this principle differently we do recognize the truth in the observation about the "another dimension" of accuracy. What we understand and we support is that there must be a cost-benefit element attached to the sought accuracy. This is a true pragmatism put into effect in all best practices in GHG inventories and in many other measurement and accounting activities. For a voluntary program, that is trying to be responsive to the messages of the market place, the accuracy sought must reflect the costs and benefits involved in the accounting methods required.

This is important in view of the complex rating system included in the draft. The issues here are even beyond cost-benefit but in the credibility of the rating system itself. Where and when it has been demonstrated that rating A is more accurate than D. The draft document fails even to attempt such demonstration.

If DOE persists in this rating then there must be alternatives to it such as the use of recognized Calculating Tools from different industry segments and other Protocols, the procedures acceptable to third-party verifiers who do not need or have not used this rating approach.

1.A.4- Emission Rating System

Although the footnotes tried to indicate similar approaches have been developed, in fact it can not show so. Thus, this original approach is troublesome, inaccurate and contrary to the enhancement efforts. We regret to comment so opposed to it since we recognized a lot of work and good intentions appear invested on it but the fact remains that the rating system has not been proven to increase accuracy neither that the different ordinal levels are correct and that the marginal cost from one level to the other are justifiable.

This element of the technical guidelines is a very questionable artifact in the registry procedures. The entire approach failed to meet the two elemental standards in these classical activities, a) that there is indeed a quantifiable difference in accuracy among the four levels and b) that if such difference is established, the marginal cost in reaching the additional accuracy level is justifiable. These are undeniable requirements and lack of time now is not justification for disregard needed rectifications or deletion. Further, as

we move out of the stationary sources where the rating system inadequacies is more egregious, we found that use of emissions defaults is then rated as high as “A” while for the stationary sources it was “D”. This system must be rejected. It is clearly contrary to the principle of accuracy, and its extra dimension, set forth in the technical guidelines. We applaud the recognition made in the principle of accuracy to the extra dimension of cost-benefit. Unfortunately it has not been applied properly.

Recommended Solution. Recognizing the federal investment made in this proposal, a complete abolition of the rating system may not be “political correct” and we can accept that. But the new version of the guidelines must then recognize at the highest level, the use of peer reviewed emission default calculating tools. Most of the important energy intensive industrial sectors do have calculating tools peer-reviewed and available too at the WRI/WBCSD protocol website or at their own web sites. In Chapter 6 of the WRI/WBCSD’s “The Greenhouse Protocol” there is a very good text about the credible and important role of activity data and calculating tools with default emissions factors. The Protocol urged the use of these recognized tools easily available in the website and others in consideration. The “Calculating Tools” of the paper and wood products industry are now internationally recognized after peer review and we expect them to be posted soon in the website of the greenhouse protocol as they are now elsewhere in the NCASI web site. Table 3, page 44 of the referenced Greenhouse Protocol lists the so far available calculating tools. They should be added by reference and included as Level “A“, calculating tools. Calculating tools that have not been peer reviewed could then be “C”. A logical calculating tool rating, B or C would be the SEIT tool. We urge this sensible recommendation be incorporated exactly as proposed in the cited reference (WRI/WBCSD, revised edition, March 2004). We also urged that rating levels be reduced to three levels since it would be easier to justify intuitively their separation. No time now for more rigorous studies. Consequently the present “pass or fail” figure for registration should be eliminated.

Expressions at the workshops clearly indicated a great number of industrial sectors will not be able to pass with this system. The same is true for the forest products sector.

1.A.4.4- Objectives of the rating system

We have examined these objectives that should have guided the design of the system and we can not consider any one of the objectives have been achieved. In fact, the sub-clause appears to show the reverse thinking predominant in this exercise. Rather than developing a rating system and then a posteriori check if meets these objectives, the developers should have asked themselves first if in order to meet these objectives there would be need of a rating system

1.A.5 Covered gases and Global warming potentials.

We do not understand the use of a TAR instead of a SAR when the SAR is used in the US GHG Inventory report to the UNFCCC. Also, the attempt to make the registry suitable for international use is complicated by the selection of a TAR. It is a minor detail after all, easy to be recalculated but it is an irritant that gives the perception that there is a lot of “invented here” attitudes in the development of these guidelines. This is regrettable for the overall purposes of the enhancement of the registry.

1.B.1-Overview. Part B Collecting information

The first paragraph is not clear. While it says that the inventory consists solely of the entity's direct emissions and withdrawals of GHG from the atmosphere, it then continues saying that in addition to its inventory, an entity's inventory shall include information on all direct emissions, sequestration and indirect emissions separately identified, etc.

It is really difficult to read and understand. The only terms we can agreed with are " "separately identified"

In terms of inventory we have direct emissions and increases/decreases in the carbon pools originated by sequestration.

1.B.2.2- Organizational boundaries

(a) it seems there is a typo and does not intend should be replace by "intends". Otherwise it is difficult to comprehend it.

(c) (3) If financial control has been the primary basis or standard for determining boundaries why to complicate the issue by the lease and partial ownership. Keep the standard uniform for all sources

1.B.3.3 Industrial process emissions

We recommend an added bullet to clarify the in the manufacturing of lime in the Kraft pulping process, the emissions are biogenic as recognized in the latest US GHG Inventory.

1.B.3.10 Engineered sequestration

This new term is perhaps a good clarifier of the confusion in the guidelines, and elsewhere, about the term sequestration in GHG inventories. It should be extrapolated to the general guidelines text to distinguish between the natural processes and those "engineered"

1.B.4.2- Estimating emissions-

Direct measurement by continuous or periodic measurement. This statement is eloquent proof of the myth and error that measurement creates a more accurate inventory since the periodicity of the application renders mute any perceived advantage, even if passing a cost-benefit test.

Since more of direct measurements are result of regulations bringing the ISO 10012 as a reference is further complicating the disastrous rating system. The draft guidelines itself in this section recognize the availability of information by direct measurements to regulated electric utilities and some large industrial facilities. So this type of information should be used but not to use it to punish those not so regulated. This vestige of "command and control", top-down approach is eloquently applied in an unproven, unjustified rating system. This is incongruent with an enhanced registry that claims to conceptually be based on the markets, and in this 2005.

1.B.4.3- Using existing data systems

while recognizing the existence of a wide variety of measurement data and procedures sanctioned by many regulations, some of them are rated with a fail rating thus questioning the validity of those same regulations. This rating approach and the efforts to defend it just open unnecessary Pandora boxes.

1.C.2.3- Mass Balance- The report admits that mass balance could provide an accuracy within 5% (could be more accurate in items such as common fossil fuels, electricity purchasing, etc). It is wasteful to recognize this accurate approach and then demand measurements (in what number?) to make them of a better rating than approved, reliable default values, which represent the variability in the sources of supply commonly encountered in a period of one year. Is an artificial command-control requirement of unproven efficacy and certainly without a cost –benefit analysis. Rating B for default emissions factors is a very wasteful, punitive and restrictive requirement.

1.C.5.5- Biogenic Fuels

We support the revised version that makes clear the CO2 emissions from the oxidation (combustion) of these biomass materials should not be considered direct emissions of added to others from fossil fuels. We also considered correct the consideration of methane and nitrous oxide emissions as proper inclusion under direct emissions since they are not included in the “recycling” concept justifying the “carbon neutral or zero CO2” from biomass oxidation.

1.D.2.3- Inference (Mobile Sources)

For mobile sources, which in some specific cases could be very important direct emissions for an entity, we found the guidelines well applied when using activity data and default emission factors. We wonder then, why this is not consistently applied for stationary sources where there has been more work done for decades in developing default values than for mobile units.

The ugly face of rating appears when considering other calculation approaches such as miles traveled, etc. There is not attempt to explain or demonstrate why one method or the other should have a different rating.

1.E.4.1.6 etc.

Here we have proof of the arbitrary command-control approach used in handling default factors. In many of these processes default factors are rated A even if when compared with default emission factors for conventional fossil fuels, etc. their development is more recent and based on far less numbers of samples or situations, without few revisions when compared to other traditional ones rated D.

1.E.4.3.1- Methane emissions from industrial wastewater.

The Georgia-Pacific GHG inventories are conducted according to its protocol available for the last few years in the web as referred in the above of these comments. We included these fugitive emissions according with procedures developed for the industry and we request again that these Calculating Tools emissions factors for specific industry sectors be recognized in the final technical guidelines.

PART 3- F to I

1.G.1- Overview- Engineered sequestration

This new term should then be consistently used when defining sequestration under 300.2 of the General Guidelines. The definition will benefit with a proper modification to avoid confusion on the biotic sequestration and the engineered one.

1.I.2.5.4- Approaches for wood products

Consistent with our position that the product carbon pool is the results of the manufacturing of different forest and agricultural products, the third paragraph needs modification by which the reference to "harvest" be replaced by "production" in the sixth line. The decay curves should only be applied to the "production volume" and not to the "harvested volume". In fact, the entire clause needs to be reconsidered in view of comments presented in the above when addressing 308(k) and prior text such as 1.I.3.5.

We do not understand the last paragraph and its reason. If the reporter is using the 100-yr method, it is only needed to consider the annual production volume. This production volume is reduced by the decay curves to estimate the fraction of the original production's amount of carbon that remains in use at the end of the 100-yr period. Only that remaining amount is counted as reduction. As conceived and explained by Georgia-Pacific, as well as NCASI and others in the industry adopting this method, the 100-yr method is a suitable approach in which current year additions to stocks in product-in-use pool are netted against the future losses from current year additions. The current year additions are simply the production quantities of the manufacturing entity for the current year. The future losses are provided by the decay three-segment decay equations mentioned in Appendix 1. This clarification is needed because the explanation in the fourth paragraph is not clear or complete for the two alternatives contemplated.[12]

Because the concept of the 100-yr was originally developed by this writer and Georgia-Pacific and is a term used in the wood and paper industry to refer to the calculation tools developed by Georgia-Pacific, we consider disingenuous to use the term 100-yr in a model not based on manufacturer production neither meeting other features of the 100-yr method as originally conceived..

We cannot understand why in the alternatives and even rating systems, this method has been ignored. It has been provided to many in the developing team and others and referenced in the web link to the GP Protocol in our previous comments. No comment or critical review on it has been received. It is based in the most accurate production data at the manufacturing plant thus effectively "debundling" the approach favored by the developers.

1,I.3.5- Sustainably Managed Forests

The consideration that a certified land area is sustainable is a correct presumption that it would be unlikely that the inventory of carbon in that land is declining. This is a

[12] More detailed information in the Georgia-Pacific Protocol, Inventory of Greenhouse Gases, Appendix 1, page 36 at www.gp.com/enviro/strategy/protocol.pdf

pragmatic approach that makes the registry more accessible to more landowners and avoids unnecessary expenditures. Nevertheless, if the land owner who invokes the “safe harbor” of the certification is allowed to report the reductions in the product carbon pool, a conflict of interest may arise since the harvested quantities are not related to any quantification in the carbon stock changes in the land area. It is a prudent conclusion that for those invoking the certification to avoid the troubles of carbon stock changes calculations the reporting of product carbon pool must be excluded.

This statement and observation simply reaffirms our petition that the registration of the product carbon sequestration be the responsibility of the manufacturer. Then the linkage with the “neutral zero” safe harbor provision would that the original wood must come from sustainable certified wood supplies by SFI or any other program. Besides the forest management entity that certifies the sustainable character of its forest management, there is need to clarify the certification of sustainability for wood supplies for the entity without timberland or buying wood from another forestry entity supplier. Such programs also exists, slightly different to those for the entity owning the timber land.

As written, the section uses language that could be confusing in requesting that these sustainability programs must have indicators that would detect long-term declines in carbon stocks. This present a paradox since the elements of all the programs we know of, are in fact, as a total, indicators of long term maintenance of the carbon stocks. We recommend that this sentence or statement be deleted to avoid this confusion that could create unnecessary costs for the forest owner and their customers.

Chapter 2- EMISSION REDUCTIONS

2.4.4.2- Reductions from Increases in Carbon Stored in Wood Products

We object again to the first sentence provision and rationale that the timber owner reporting on the forest carbon stock has the responsibility or be allowed to report on the product carbon pool increases. We have presented ample information in the above about the specific reasons not only for the forest manufacturing sector but for other sectors concerned about this ill-conceived idea to give the rights to the raw material entity. It goes beyond forest products manufacturing and increases in carbon stock but also to issues as avoided emissions, etc. we have also pointed out to competitive issues that the DOE must respect and not favored one entity above the other arbitrarily. It is not a matter of “winners and loosers” since the guidelines must support equitable and unbiased approaches that avoid or minimize the number of affected parties. Sa suggs ted, and entire manufacturing sector is discriminated against.. They do exist and we have pointed them out in the CAPSULE and the rest of this comments, section 308, etc.

We also point that the calculation approach indicated in this section is not the correct. The 100-yr method or GPCARB uses the annual production of forest product in a given category and applies the decay curves a t=100 years thus indicating the remaining expected amount of carbon remaining in storage 100 years after the production year.

It is a simple and valid calculation easy to understand once the yoke of coupling its concept and calculation with the harvesting is severed. As conceived and explained by Georgia-Pacific, as well as NCASI and others in the industry adopting this method, the 100-yr method is a suitable approach in which current year additions to stocks in

product-in-use pool are netted against the future losses from current year additions. The current year additions are simply the production quantities of the manufacturing entity for the current year. The future losses are provided by the decay three-segment decay equations mentioned in Appendix 1. We again urge the developers to consult the proper references provide with our comments so this calculation is done properly and by the proper entity- the manufacturing entity.

In the forest the carbon stock increases by biomass growth and is decreased by harvesting. No decay equations are used in these calculation but straightforward carbon stock or fluxes calculations. In the 100-yr method of the industry the difference production at a base year and a subsequent year does not create an emission, which appears to be the result of the presented calculation in the guidelines.

2.3- Base Period and Base Values

In the above of these comments, we have encouraged and provide reasons and rules why the base year emissions (base value) should be corrected as needed by events normally occurring in the entity. The entire section is very complex when simple rules, already offered and derived from the WRI/WBCSD GHG protocol suffice.

Appendix 1- - section 4- Comments submitted already in the above of these extensive document apply to the section of this Appendix regarding the proper reporting and registration by the manufacturer of the forest product, using the proper method in the 100-yr method or GPCARB (100-yr method is the term used for the GPCARB as available for use in the industry domestically and internationally. We have cautioned about the 100-yr term used now in the guidelines, which improperly confuses the terms.

CONCLUSIONS

We recognize that these comments are extensive but we consider they are consistent with the proposal and its extension (about 500 pages). No specific comments are made on the Appendix on forestry, nevertheless prior comments on 308 (k), etc. clearly would apply as pertinent to the text of this element of the proposals. We have again provided clear and ample references to the GPCARB or 100-yr method and object to the alternative to calculate product carbon pool as stated in these proposals been labeled “100-yr”.

We are available at any moment to clarify and expand on these comments as may be requested by any person in the editing team of these documents. Thank you for the opportunity of commenting.

Sincerely,

Sergio F. Galeano, Ph.D.
Senior Manager, Product Policy and Assurance
Georgia-Pacific Corporation

cc- list GP and outside